

IN THE CLAIMS

1. (Currently Amended) A method for transmitting a plurality of data types over a plurality of transmission paths, comprising:

storing data of a plurality of compressed and non-compressed data types;

receiving requests for the stored data;

transmitting distinct streams of data of both the compressed and non-compressed data types over each of a plurality of transmission paths; and

processing the transmitted data in accordance with the type of transmitted data after the transmission of the data.

2. (Original) The method of claim 1, wherein storing the compressed data types further comprises placing the data in a plurality of First-In First-Out (FIFO) buffers.

3. (Original) The method of claim 1, further comprising requesting the stored data by introducing an identification pattern into a transmission request, the identification pattern indicating the type of data requested.

4. (Currently Amended) The method of claim 1, wherein transmitting distinct streams of data of both the compressed and non-compressed data types further comprises transmitting the data identification pattern associated with the data type being transmitted at the same time as the data being transmitted.

5. (Currently Amended) The method of claim 1, wherein transmitting distinct streams of data of both the compressed and non-compressed data types further comprises transmitting Linework (LW) data over any one of a plurality of transmission paths.

6. (Currently Amended) The method of 1, wherein transmitting distinct streams of data of both the compressed and non-compressed data types further comprises transmitting Linework control (LWC) data over any one of a plurality of transmission paths.

7. (Currently Amended) The method of 1, wherein transmitting distinct streams of data of both the compressed and non-compressed data types further comprises transmitting continuous tone (CT) data over any one of a plurality of transmission paths.

8. (Original) The method of claim 1, wherein processing the transmitted further comprises reading a word of the data into a data decompression module every one half clock cycle.

9. (Original) The method of claim 8, wherein processing the transmitted data further comprises multiplexing the different types of data and processing each type of data received in accordance with the data type.

10. (Original) The method of claim 9, wherein processing the transmitted data further comprises losslessly decompressing the data when the data received is Linework (LW) data.

11. (Original) The method of claim 9, wherein processing the transmitted data further comprises losslessly decompressing the data when the data received is Linework control (LWC) data.

12. (Original) The method of claim 9, wherein processing the transmitted data further comprises decompressing the data when the data received is continuous tone (CT) data.

13. (Currently Amended) A method for transmitting a plurality of data types over a plurality of transmission paths comprising:

storing data of a plurality of compressed and non-compressed data types in a plurality of

First-In First-Out (FIFO) buffers;

requesting the stored data by introducing an identification pattern into a transmission

request, the identification pattern indicating the type of data being requested;

transmitting the identification pattern associated with the data type being transmitted at

the same time as the data being transmitted;

transmitting a distinct stream of Linework (LW) data over any one of a plurality of transmission paths;

transmitting a distinct stream of Linework control (LWC) data over any one of a plurality of transmission paths;

transmitting a distinct stream of continuous tone (CT) data over any one of a plurality of transmission paths.

processing the transmitted data in accordance with the type of data after the transmission of the data further comprising:

reading a word of data into a decompression module every one-half clock cycle;

multiplexing the different types of data and processing each type of data received in accordance with the data type;

losslessly decompressing the data when the data received is Linework (LW) data;

losslessly decompressing the data when the data received is Linework control (LWC) data; and

decompressing the data when the data received is continuous tone (CT) data.

14. (Currently Amended) A system for transmitting a plurality of data types over a plurality of transmission paths comprising:

a memory module configured to store a plurality of compressed and non-compressed data types;

a handshaking control module configured to control the data-flow of a distinct stream of data into a data processing module; and

a data processing module configured to receive and process the transmitted data in accordance with the type of the transmitted data.

15. (Original) The system of claim 14, wherein the memory module further comprises a plurality of First-In First-Out (FIFO) buffers.

16. (Original) The system of claim 14, wherein the handshaking control module is further configured to receive data from a host and place the received data into the memory module.

17. (Original) The system of claim 16, wherein the handshaking module is further configured to place the data received into one of the plurality of FIFO buffers depending upon the type of data received.

18. (Original) The system of claim 14, wherein handshaking control module is further configured to receive requests for print data from the data processing module.

19. (Original) The system of claim 18, wherein the handshaking control module is further configured to place the data requested from the data processing module on the data bus appropriate for the data type requested.

20. (Original) The system of claim 19, wherein the handshaking control module is further configured to place continuous tone (CT) data upon a dedicated continuous tone bus.

21. (Original) The system of claim 19, wherein the handshaking control module is further configured to place Linework (LW) data upon the least busy of a plurality of buses used for either Linework (LW) or Linework control (LWC) data.

22. (Original) The system of claim 19, wherein the handshaking control module is further configured to place Linework control (LWC) data upon the least busy of a plurality of buses used for either Linework (LW) or Linework control (LWC) data.

23. (Original) The system of claim 14, wherein the data processing module is further configured to evaluate header information relating to a print job to determine what types of data to request from the handshaking control module.

24. (Original) The system of claim 23, wherein the data processing module is further configured to read one word of received data into a decompression module every one-half clock cycle.

25. (Original) The system of claim 24, wherein the data processing module is further configured to process each type of data received in accordance with the data type.

26. (Original) The system of claim 25, wherein the decompression module is configured to losslessly decompress Linework (LW) data.

27. (Original) The system of claim 25, wherein the decompression module is configured to losslessly decompress Linework control (LWC) data.

28. (Original) The system of claim 25, wherein the data processing module is further configured to decompress continuous tone (CT) data.